

Application Serial No. 10/031,105
Amdt. dated August 9, 2004
Reply to Office Action of April 7, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Canceled)

Claim 2 (Currently Amended) The spreader Control system according to claim 11 ~~claim 1~~, wherein a plurality of ~~characterized in that~~ rope forces of different sizes have to be generated to the multi-rope lever system for performing the telescopic movements of the telescopic beams (3) and the different locking movements (4) of the twistlocks (6).

Claim 3 (Currently Amended) The spreader Control system according to claim 2, characterized in that:

 a first rope force has to be generated to the lever system, as the telescopic beams (3) perform the telescopic movement;

 a second rope force, is generated to locate at least one ~~as the~~ locking points (81) of the telescopic beams (3) to move to the place of a ~~the~~ locking unit ~~units~~ (82) of the frame (2); and

 a third rope force is generated to actuate ~~as the~~ twistlocks (6) of the telescopic beams perform the locking movements, and that the first, second and third rope force differ clearly from each other.

Claim 4 (Currently Amended) The spreader Control system according to claim 11 ~~one of the claims 1-3~~, characterized in that the locking members (8) include a ~~the~~ locking point (81), comprising a drive ramp (812) and a form-locking groove (811), and ~~that the~~ a locking part ~~parts~~ (82) ~~include~~ including a locking roller (822) fitting into the form-locking groove and a locking spring (823) locking the locking roller in said form-locking groove the compression force of the locking spring being adjustable, ~~for example~~ with a magnet (821).

Claim 5 (Currently Amended) The spreader Control system according to claim 11 ~~one of the claims 1-4~~, characterized in that the multi-rope lever system (4) is common to both the

Application Serial No. 10/031,105
Amdt. dated August 9, 2004
Reply to Office Action of April 7, 2004

telescopic beams (3; 3a, 3b) of the spreader, and that different rope forces may be generated to the multi-rope lever system with one actuator (7).

Claim 6 (Currently Amended) The spreader ~~Control~~ system according to claim 5, characterized in that the external force directed to the telescopic beams (3) is partly neutralized by the elasticity of the multi-rope lever system (4) and partly by the interaction between the locking point (81) of the telescopic beams and the locking unit (82) of the frame.

Claim 7 (Currently Amended) The spreader ~~Control~~ system according to claim 11 ~~one of the claims 1-6~~, characterized in that the telescopic beams (3) operate as counter weights for each other with the help of the multi-rope lever system (4) and the support rollers (51), as the first telescopic beam is at a different height from the second telescopic beam.

Claim 8 (Withdrawn)

Claim 9 (Withdrawn)

Claim 10 (Withdrawn)

Claim 11 (New) A spreader system for lifting containers comprising:

a spreader frame;

at least one telescopic beam telescopically movable in said spreader frame;

at least one locking member positioned between said spreader frame and said at least one telescopic beam for stopping the telescopic movement of said at least one telescopic beam at a desired place in relation to said frame;

Application Serial No. 10/031,105
Amdt. dated August 9, 2004
Reply to Office Action of April 7, 2004

at least one twistlock in said at least one telescopic beam having a locked and unlocked position;

a joint multi-rope lever system for performing the telescopic movement of said at least one telescopic beam and also for actuating said at least one twistlock;

at least one actuator operating said joint multi-rope lever system; and

a control system for supervising and controlling the operations of said at least one actuator and said joint multi-rope lever system.